THE PORTLAND TRANSIT MALL IMPACT STUDY

DOWNTOWN BUILDINGS: NEW CONSTRUCTION, MAJOR RENOVATION AND DEMOLITION

BUREAU OF PLANNING
CITY OF PORTLAND, OREGON
DECEMBER, 1981

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DOWNTOWN BUILDINGS is one of three reports comprising the Land Use and Economic Effects component of the Transit Mall Impact Study prepared by the City of Portland Bureau of Planning. The other two reports are:

- ECONOMIC OVERVIEW
- RETAIL FIRM LOCATIONAL ANALYSIS

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INTRODUCTION

BACKGROUND

Transit malls are a relatively new form of municipal projects; they have been constructed in the U.S. only within the last 15 years. In the 1970's a new wave of concern over deteriotating business conditions in downtowns combined with increased concern over traffic congestion and environmental problems brought renewed interest in transit improvements as a partial solution. Recognizing that fixed guideway systems are expensive, most cities have begun to focus attention on improving bus service by means of operational measures. Examples are: priority signalization, preferential lanes, improved loading facilities, route rationalization, and improved scheduling. In particular, there has been a trend toward consolidation of routes onto fewer streets in order to make more efficient use of preferential treatment, while also simplifying the transit system and making transfers easier. Also, under the general heading of "Transportation Systems Management," public officials are encouraging carpools, transit usage, shorter trips and pedestrianization to otherwise mitigate the growth of auto congestion.

Transit malls represent a combination of two trends: (1) pedestrian malls and (2) preferential treatment for buses on city streets. They consist of relatively auto free areas which retain a roadway reserved for transit vehicles. Auto access is denied or limited strictly to local traffic and cross-street traffic. Typically, sidewalks are widened and other pedestrian amenities are added. By addressing the needs of pedestrians and facilitating the operation of transit, the mall becomes an important part of the collection-distribution process of a city wide or regional transit system.

A transit mall can be viewed as a compromise shopping mall,

designed to satisfy merchants who may feel that some vehicular access is essential to their business. This compromise view is based on the notion that neither pedestrian needs nor transit volumes taken by themselves are sufficient to justify removing entire streets from automobile use, but together they are. Further, pedestrian and transit uses are considered complementary uses. By combining the two, a special focus may be created in the downtown area that brings people together, stimulates business, encourages bus ridership, improves transit service, enhances environmental quality, and stimulates development in a pattern that can be better served by transit.

HISTORICAL DEVELOPMENT OF PORTLAND, OREGON'S TRANSIT MALL

While the concept of segregating transit from auto traffic on Portland's downtown streets was advanced as a solution to downtown traffic problems as early as the 1950's, the idea of a transit mall for Portland, Oregon was initiated in 1970 by a coalition of downtown business leaders and property owners. A Downtown Plan Study Group was formed, involving the City of Portland, Multnomah County and a variety of private consultants. Shortly thereafter, a Technical Advisory Committee, composed of technical personnel from various public agencies, was also formed, as well as a Citizen Advisory Committee.

After 15 months of discussion and study, a report (Planning Guidelines - Portland Downtown Plan) was published which included a transit mall concept for Fifth and Sixth Avenues.

The transit mall concept was identified as an integral element in the Downtown Plan and reiterated in the City's Transportation Control Strategy for Federal Air Quality Standards (1972). Therefore, the transit mall concept should not be viewed as an independent project but as a part of a much broader public and private investment plan.

Through a program funded by the Urban Mass Transportation Administration (UMTA), the Tri-County Metropolitan Transportation District of Oregon (Tri-Met) initiated a feasibility study for a Portland Transit Mall in January of 1973. The results of the study were favorable. This effort was followed by a preliminary design, completed in December of 1975. The funding for the Transit Mall was available under the Urban Mass Transportation Act of 1964 as amended. This act authorized the Secretary of Transportation to provide additional assistance for the development of comprehensive and coordinated mass transportation systems, both public and private, in metropolitan and other urban areas, and for other purposes. The construction was a $15 million project funded 80 per cent by UMTA and 20 per cent by Tri-Met. Construction began in February, 1976; partial operation started in December, 1977; the Mall was completed early in 1978.

The Transit Mall is located in the heart of Portland's Central Business District (see Figure 1), is eleven blocks long (½ mile), and consists of two one-way streets, S.W. Fifth and Sixth Avenues. Physically, the Transit Mall involved reconstructing all improvements within the street right-of-way. This included widening existing 15' sidewalks to 26' along the right lane of each avenue where buses load. Sidewalks on the opposite side of the street were widened from 15' to 18' where there is auto access and to 30' in other blocks. Sidewalks were reconstructed with brick paving and granite curbs. London plane trees, spaced at approximately 25 feet, line the two avenues. This boulevard treatment is enhanced by refurbished historic street light standards and other street furniture. Most significant among the items of street furniture are 31 bronze-clad, glass roofed bus shelters located at bus stops.

An access lane for automobiles was provided in all but six blocks on the two Mall streets. These access lanes do not

FIGURE 1

PORTLAND CENTRAL BUSINESS DISTRICT

TRANSIT MALL

0 1200'

allow through traffic, since they run for no more than three continuous blocks. Access from cross streets to these lanes is made by turning left into the Mall street. Cross street traffic is not allowed to turn right into the access lane because this would require turning across the bus lane. The widened sidewalks allow room for people waiting for buses, as well as 250 trees, 31 bus shelters, 54 benches, 34 bicycle bollards, 112 trash containers, 48 banner poles, 84 light bollards, 8 trip planning kiosks, plus display kiosks, concession stands and other features. It has been proposed that the Transit Mall eventually be extended a few blocks to connect with a regional transportation center at the northern end of the downtown. This would provide a link between suburban transit stations, shuttle buses, inter-city buses, Amtrak, and future transit improvements such as light rail.

OBJECTIVES OF THE PORTLAND TRANSIT MALL

Several objectives influenced the design of the Transit Mall. An important objective was to provide a more efficient, convenient transportation alternative for commuters and shoppers. Transit improvements were expected to increase transit use. This, in turn, was expected to promote more efficient land use, reduce energy consumption and reduce pollution. Another objective was to revitalize the downtown area.

The Mall design incorporates a number of features aimed at improving the efficiency and hence the attractiveness of transit. Two lanes on each avenue are designated exclusive bus rights-of-way. They are intended to increase transit capacity and reduce bus travel time by minimizing conflicts between autos and buses. A third lane, adjacent to the two transit lanes in eight of the eleven blocks, provides limited access to non-transit vehicles. The three blocks which do not have this lane act as a barrier to non-transit vehicles which

could otherwise use the Mall as a through north-south route. Non-transit vehicles may also cross the Mall on all east-west cross streets. This provides additional access while minimizing auto-bus conflict.

The Mall was also designed to encourage transit by making it more convenient and comfortable. Downtown bus stops were centralized to make transfers easier. Comprehensive route and schedule information are available at bus stops and information kiosks. Sheltered waiting areas and other services are provided. These and other features were included to make it easier for people to understand and use the transit system.

In addition to basic transit improvements, the Mall was designed to provide an environment inviting to residents and visitors, thereby making downtown businesses more competitive with suburban locations. Pedestrian amenities include widened sidewalks, street trees and landscaping, separation of passenger waiting zones from the store fronts and sidewalks, improved street lighting, street furnishings, and more attractive street graphics, signing and traffic control devices.

Finally, it was hoped that the completed Mall would stimulate growth in the downtown area, through stabilization or growth in the number of retail firms, lower vacancy rates, lower turnover rates, increased retail sales and other business activity, greater private and public investments, and more jobs.

THE PORTLAND TRANSIT MALL IMPACT STUDY

The Portland Transit Mall Impact Study was funded by the Urban Mass Transportation Administration to analyze a wide range of impacts related to the Portland Transit Mall. This study is a joint project involving the following agencies: Metropolitan Service District, City of Portland--Bureau of Planning, Tri-

County Metropolitan Transportation District of Oregon, Center for Urban Studies--Portland State University.

The purpose of the study is to provide useful information for public and private organizations at both the national and local level. At the national level, results of the study will help answer questions that are asked of Portland by other local governmental agencies. These agencies have expressed interest in Portland's experience with a transit mall and possible applications to their locale. They are also interested in the transportation-land use interactions that can be achieved through investments in transit. At the local level, information will be used in assessing impacts that relate to the operation, maintenance and possible extension of the Transit Mall.

This study evaluates a wide range of impacts which can be attributed to the construction and operation of Portland's Transit Mall. At the same time it must be recognized that the impacts of the Portland Transit Mall are difficult to isolate from a series of other public and private activities occurring during the same time period.

The specific impacts that were identified, measured and analyzed by this study and the agencies conducting this research are:

I. Tri-County Metropolitan Transportation District of Oregon
   A. Transit Operation Impacts
   B. Safety Impacts
      1. Traffic Accidents
      2. Crime
   C. Supervision
   D. Transit Users Survey

II. The City of Portland--Bureau of Planning

A. Environmental Impacts
   1. Noise
   2. Air Quality
B. Economic and Land Use Impacts
   1. Economic and Land Use Overview
   2. Downtown Buildings: New Construction, Major Renovation and Demolition
   3. Retail Firm Location and Re-Location Movements
C. Traffic Impacts
D. Pedestrian/Parking Survey

III. Center for Urban Studies--Portland State University
   A. Downtown Employee Impact Survey
      1. Travel Behavior
      2. Mode Changes
      3. Environmental Attitudes and Perception
      4. Design Aspects
   B. Retial Firm Locational Decision Impact Survey
      1. Effects of Transit Mall during construction
      2. Effects of Transit Mall after construction
   C. Economic and Land Use Impacts
      1. Changes in Land Values
      2. Changes in Rental Values
   D. Downtown Revitalization Impacts
   E. Institutional Networks

The following report is one of a series published by the Portland Transit Mall Impact Study. The contents of this report will be integrated into a Final Report.

PURPOSE OF THE DOWNTOWN BUILDINGS REPORT

The Downtown Buildings report describes and analyzes in terms of square footage of floor area the results of an inventory of downtown buildings which experienced one or more of three building activities sometime between 1973 and 1970. The three building activities are new construction, major renovation and demolition. The downtown study area was defined relative to the Transit Mall which was centrally located within it. The study area was divided into five zones with Zone 1 surrounding the Transit Mall and two zones each east and west of the Mall Zone.

While the occurrence of building activities are often discussed relative to the Mall Zone, no attempt is made to assess the impact of the Mall on the activities.

The report is composed of five sections. Section I describes the methodology used to compile the inventory of downtown buildings involved in the three activities. Section II presents overall findings of square footage of floor space involved in new construction, major renovation and demolition. Section III describes building activity on a zone by zone basis, and Section IV describes the activity by three time periods: Before-Mall Construction (1973 - 1975), During-Mall Construction (1976 - 1977) and After-Mall Construction (1978 - 1980). Sections II, III and IV are separately summarized at the end of each one. Section V is the appendix detailing the downtown building inventory.

SECTION I

METHODOLOGY

INTRODUCTION

An inventory was compiled of buildings involved in three building activities - new construction, major renovation and demolition in the Portland Central Business District, as defined by the U.S. Census of Retail Trade. Building activity underway between January 1, 1973 and on or before December 31, 1980 was included in the inventory. Buildings within the 155-block inventory area which experienced one or more of the three building activities were identified and information about them collected and analyzed. Data collected for each of the identified buildings included: type of building activity (new construction, major renovation or demolition), dates of building activity, and square footage of building floorspace involved in the following seven building uses: vacant, commercial, office, hotel, housing, institutional and parking.

This section of the report describes in detail the methodology employed for the compilation of the inventory. It includes definitions of the study time frame, the study area boundaries, the three building activities, and the seven building uses. The process of identifying building activities and uses and the methods of calculating floor area involved in these activities and uses are also described.

STUDY TIME FRAME

Building activity which was underway on or after January 1, 1973 through December 31, 1980 was included in the inventory. This eight year study period was divided into the following three time periods:

- o Before-Mall Construction, 1973 - 1975
- o During-Mall Construction, 1976 - 1977
- o After-Mall Construction, 1978 - 1980

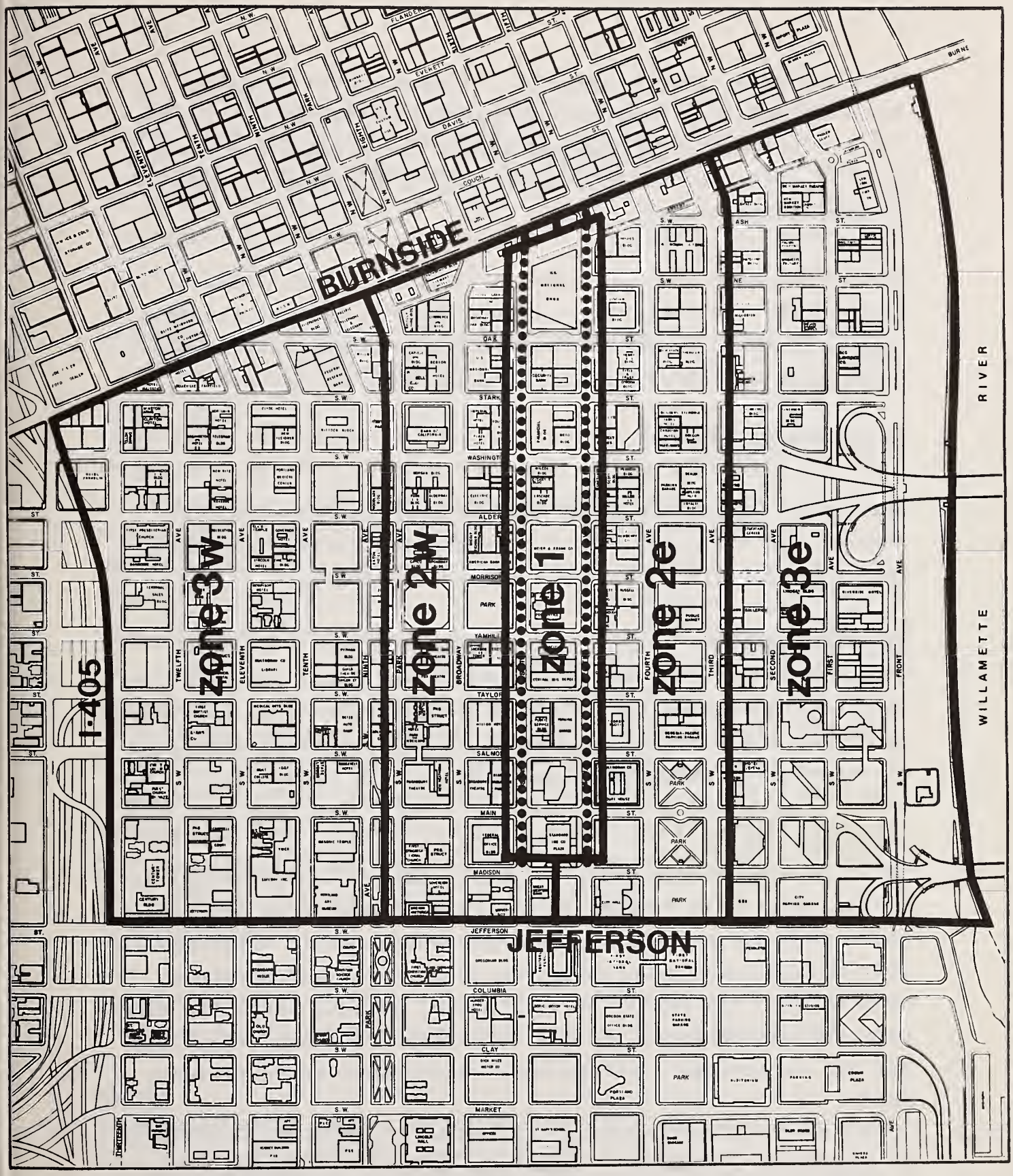
STUDY AREA BOUNDARIES

The inventory boundaries are the same as the Portland Central Business District, as defined by the U.S. Census of Retail Trade, except on the west side. The study area is presented in Figure 2. The west side of the CBD as defined by the Census of Retail Trade is SW Twelfth Avenue. The study area used for this report is bounded by the I-405 freeway to the west, W. Burnside to the north, SW Jefferson to the south and the Willamette River to the east. The area includes 155 city blocks.

The inventory area was divided into five zones as shown in Figure 2. Zone One (1) includes all addresses on both sides of the Mall streets, 5th and 6th Avenues, from Madison to Burnside and the 500 blocks of all cross-streets between but excluding Burnside and Madison. The terms "Mall Zone", "Transit-Mall Zone" and "Zone 1" are all used interchangeably to refer to this centrally located zone.

Zone Two East (2E) includes all addresses on both sides of 3rd and 4th from Burnside to Jefferson, the 300 and 400 blocks of all cross-streets between Jefferson and Burnside, including the north side of Jefferson and south side of Burnside to mid-block between 5th and 6th.

Zone Three East (3E) includes all addresses both sides of Front, 1st and 2nd from Burnside to Jefferson, the 00 to 200 blocks of all cross-streets between Jefferson and Burnside, including the north side of Jefferson and the south side of Burnside.



INTERNAL ZONES WITHIN PORTLAND CBD

N

0 600'

●●●●●●● TRANSIT MALL

Zone Two West (2W) includes all addresses both sides of Broadway and Park, the 600 through 700 blocks on all cross-streets between Jefferson and Burnside including the north side of Jefferson and the south side of Burnside to mid-block between 5th and 6th.

Zone Three West (3W) includes all addresses both sides of 9th, 10th, 11th, 12th and 13th, the 800 through 1300 blocks of all cross-streets between Jefferson and Burnside including the north side of Jefferson and the south side of Burnside.

BUILDING ACTIVITIES

Structures within the study area which experienced one or more of the following building activities during the study period were included in the building inventory.

New Construction

The creation of at least one story of new floor area under a roof was considered new construction activity. The construction of a new building on a vacant site as well as additions to existing buildings were included in this category.

Major Renovation

Major renovation was defined as substantial improvements requiring more than routine repair work to make a building decent, safe and sanitary. The improvements could vary from gutting and redesigning interiors to cosmetic improvements coupled with the repair of substantial defects resulting from deferred maintenance, and the conversion of a structure from one use to another. Furthermore, major renovation activity must:

- Result in structural improvements which primarily benefit the building rather than the tenant(s). The emphasis of

the work must have been on the interior of the building. Projects involving only exterior improvements such as cleaning and painting were not included.

- Require the vacancy of the entire building or at least one full floor.

- Result in a formerly vacant or underused building being restored to full or greater than previous use.

Three remodelled department store buildings were included in this inventory although they do not fit the general definition of major renovation. They are Meier and Frank, J.C. Penney and Frederick and Nelson, all located in Zone 1 along the Transit Mall. The remodelling of these three buildings was included as major renovation activity because of their considerable significance to the economy of downtown Portland.

Demolition

Structures completely wrecked and sites leveled were considered demolitions; interior gutting of buildings was not. Buildings severely damaged by fire yet still standing were not included as demolitions unless they were also wrecked within the study time frame.

BUILDING USES

Useable floor area within the buildings included in the inventory was broken down by the following seven building uses.

Vacant

A building or at least one full floor of a building which had been vacant for at least one year before the building activity began was included in the vacant use category. Vacancy was determined through the use of the Polk City Directories. If

an address was listed in a directory without an occupant one year before the building activity began, the building (or full floor) was considered vacant.

Commercial

The commercial use category includes theaters, galleries, eating and drinking establishments and customer services such as beauty shops. Accessory office and warehousing space in predominantly retail stores was all considered commercial use. This category is broad, including all types of commercial space which does not fall into the other building use categories.

Office

The office use category includes business, professional, medical and dental offices, banks, government leased office space and utility offices and operations. Office space accessory to another more predominant use on site was classified by the more predominant use rather than office use. For example, the manager's office in a theatre would not have been separated out of the overall commercial classification of all floor area in the theatre.

Housing

The housing use category includes apartments, condominiums and permanent residential hotels. There were no single family dwellings within the study area boundaries between 1973 and 1980.

Hotel

Tourist and predominantly transient accommodations are included in the hotel use category.

Institutional

The institutional use category includes museums, churches,

the public library and private clubs. Government offices and services within public buildings are included, but not government leased space, which is included in the office use category. City owned parking garages are included in the parking use category.

Parking

Both above-ground and subterranean parking lots were included in the inventory when they were the primary built uses of the land. Therefore, above-ground parking structures were included, but surface lots were not. Subterranean lots under public parks were included, although only the lot under O'Bryant Square experienced any of the three building activities during the study period. Other subterranean lots were accessory to the buildings above them, and therefore, their floor area was not included in the inventory.

IDENTIFICATION OF BUILDING ACTIVITY AND USES

Four documents were used for the initial identification of buildings to be included in the inventory of the three building activities. The documents are: (1) "The City of Portland Downtown Development File," prepared by the Portland Development Commission in August, 1979; (2) "The Portland Metro Area...Today 1981," compiled by the Urban Land Use Inventory; (3) "The Downtown Housing Inventory" prepared by the Portland Development Commission in 1977; and (4) "The Downtown Land Use Inventory," published by the City Bureau of Planning in November, 1979.

Next, Bureau of Planning and Portland Development Commission personnel and commercial real estate persons familiar with downtown were asked to identify other projects with which they were familiar. Once buildings were identified, follow-up interviews were conducted with their owners, developers,

leasing agents and architects to collect descriptions of the building activities and uses, the floor area involved, the dates of the activities, and potentially for the identification of other activity to be included in the inventory.

Building activity information gathered via the document search and personal interviews was not always complete or in agreement. Final inspection cards filed at the Bureau of Buildings were reviewed to fill some of the information gaps, and finally, a walking survey of the study area completed the identification and data collection steps.

Floor area figures gathered from the various sources often differed considerably, based on individual methods of calculation. Consequently, standard methods of calculating gross square footage and useable square footage of each building included in this inventory were devised and the results compared to the figures initially gathered. A description of these standard calculation procedures follows.

FLOOR AREA CALCULATIONS

Building activity and uses in this report are consistently discussed in terms of useable floor area of a building. The useable floor area is the gross floor area less a percentage of space occupied by such things as halls, stairwells and elevator shafts. Throughout the report, the phrases "floor area," "useable floor area," "square footage," "floor space," and "space" are used interchangeably to refer to the useable floor area figure. References to other floor area figures are specifically identified, for example, as "gross floor area."

Standard calculations were used to determine the gross floor area of each building that underwent major renovation or

demolition. It was assumed that these buildings, unlike many of the more modern buildings downtown, were built out to the site or property lines. The gross square footage of each of these structures was calculated by multiplying the number of building stories times the site area or square footage of land on which the activity occurred. Ten percent was then subtracted from the gross square footage of each building which was less than four stories in height to obtain the useable floor area. Fifteen percent was subtracted from the gross square footage of each building which was four or more stories in height. It was assumed that taller buildings require more space for elevator shafts and support systems than those under four stories in height.

These standard calculations assume, therefore, an 85 percent building efficiency for buildings of four or more stories and a 90 percent efficiency for buildings less than four stories in height. If the results of these calculations disagreed with floor area figures gathered via the document search and/or the personal interviews by as much as one full floor of the building, a physical inspection of the building was conducted. Differences in floor area figures were generally explained by the presence of mezzanines or atriums or by buildings which were not built out to the site or property lines.

Figures used for the gross square footage and useable floor area of newly constructed buildings were acquired from developers and leasing agents whose records are more recent and complete. Newer buildings are often irregular in shape, rendering the standard method of calculation used for major renovation and demolition unreliable. Acquired data was verified with Bureau of Buildings records.

SECTION II
TOTAL BUILDING ACTIVITY AND USE
1973 - 1980

Section II discusses total square footage of useable floor area involved in new construction, major renovation and demolition within the study area from 1973 to 1980. Table 1 presents total square footage broken down by these three building activities. Table 2 presents for each of these activities the square footage of floor area occupied for the following uses: vacant, commercial, office, hotel, housing, institutional and parking.

TABLE 1
TOTAL BUILDING ACTIVITY
1973 - 1980

ACTIVITY	SQUARE FOOTAGE*	PERCENT
New Construction	3,649,089	55
Major Renovation		
Before	1,922,354	
After	1,891,640**	28
Demolition	1,148,888	17
Total	6,689,617	100

*Square Footage is abbreviated with "S.F.": in all subsequent tables and represents useable floor area.

**The "After Major Renovation" figure is used for calculation of total building activity.

A total of 6.7 million square feet of floor area was involved in the three building activities during the eight year period under study. Over half (55%) of that square footage was involved in new construction, 28 percent in major renovation and 17 percent in demolition.

NEW CONSTRUCTION

New construction activity accounted for 3.6 million square feet of floor area, of the total 6.7 million. Almost half

(48%) of that new area was constructed for office use and 28 percent for institutional use. The new Public Services Building, the Justice Center, and the Federal Building account for 100 percent of new square footage occupied for institutional use.

TABLE 2

TOTAL FLOOR AREA IN BUILDING USES
BY BUILDING ACTIVITY
1973 - 1980

BUILDING USES	ACTIVITY							
	NEW CONSTRUCTION		MAJOR RENOVATION				DEMOLITION	
			BEFORE		AFTER			
	S.F.	%	S.F.	%	S.F.	%	S.F.	%
Vacant	NA	NA	424,684	22	-	-	569,047	50
Commercial	377,018	10	883,790	46	1,020,652	54	211,445	18
Office	1,758,930	48	419,905	22	626,113	33	90,250	8
Hotel	-	-	66,300	3	-	-	51,950	5
Housing	5,524	1	69,150	4	244,875	13	107,100	9
Institutional	1,028,816	28	24,525	1	-	-	105,596	9
Parking	478,801	13	34,000	2	-	-	13,500	1
Total	3,649,089	100	1,922,354	100	1,891,640	100	1,148,888	100

Thirteen percent of the 3.6 million new square feet was constructed for parking use and ten percent for commercial use. New housing use captured one percent of all new construction activity. This one percent represents the two-floor apartment rental addition of 5,524 square feet onto the existing Thomas Mann Building. There were no new hotels built within the study area between 1973 and 1980.

MAJOR RENOVATION

A total of 1.92 million square feet of floor area became involved in the renovation process during the eight year study period. However, a total of 1.89 million square feet of useable floor area resulted from all major renovation activity. During the renovation process, internal modifications sometimes resulted in more useable square footage in certain buildings and less floor area in others. The overall

modifications made to buildings during renovation activity resulted in a net loss of 30,714 square feet, or less than two percent of the initial 1.92 million square feet.

While 22 percent of the floor area which became involved in renovation activity was vacant at least one year before work began, the remaining 78 percent was in active use. Almost half (46%) of the floor area was in commercial use; 22 percent was in office use; and the remaining ten percent was divided among hotel, housing, institutional and parking uses.

After the renovation work was completed, the resulting total of 1.89 million square feet of floor area became occupied for only three uses - commercial, office and housing - due to conversion from previous to new uses. Over half (54%) of the floor area was occupied for commercial use, 33 percent for office use and 13 percent for housing use.

DEMOLITION

Within the study area, a total of 1.1 million square feet of floor area was demolished between 1973 and 1980. Fifty percent of the space had been vacant at least one year prior to demolition, and the remaining 50 percent was distributed among all other building uses. Eighteen percent of the demolished floor area was in commercial use, nine percent each in housing and institutional uses, eight percent in office, five percent in hotel use and one percent in parking use.

SUMMARY

Of all three building activities, there was almost twice as much new construction as either major renovation or demolition in the study area. Over 75 percent of that new floor area was constructed for office and institutional uses. More

of the renovated square footage was occupied for commercial use (46%) than for any other use, and half of the demolished space (50%) had been vacant for at least one year prior to demolition.

SECTION III
BUILDING ACTIVITY AND USE BY ZONE
1973 - 1980

Section III discusses the distribution of the three building activities and the seven building uses among the five zones over the entire eight year study period. The section is divided into three parts, each of which examines activity in the zones from a different point of view. The first part briefly discusses the overall extent of new construction, major renovation and demolition in the five zones. The second part focuses on the individual zones. It examines for each zone the primary building uses involved in new construction, major renovation and demolition. This discussion begins with Zone 3E, the easternmost zone in the study area, and proceeds westward ending with Zone 3W.

The third part focuses on building activities across all five zones. It highlights in which zones the primary building uses involved in new construction, major renovation and demolition were the most predominant. These three parts are followed by a summary of the major findings in this section.

BUILDING ACTIVITY IN ALL ZONES

Table 3 presents the extent of new construction, major renovation and demolition activities in the five zones. Zone 1 experienced the most building activity of any zone, with 2.6 million square feet of floor space involved in the three activities. A total of 1.5 million square feet became involved in building activity in Zone 2E and 1.18 million square feet in Zone 3E. Less than 800,000 square feet of space were involved in Zones 2W and in Zone 3W.

TABLE 3

TOTAL BUILDING ACTIVITY
BY ZONE
1973 - 1980

ZONE	ACTIVITY									
	NEW CONSTRUCTION			MAJOR RENOVATION*			DEMOLITION			TOTAL
	S.F.	% New Construction	% Total Activity in Zone	S.F.	% Major Renovation	% Total Activity in Zone	S.F.	Demolition	% Total Activity in Zone	Activity in Zone
3E	796,565	22	67	169,386	9	14	218,410	19	19	1,184,361
2E	1,041,405	29	67	127,963	7	8	384,307	34	25	1,553,675
1	1,362,390	37	52	1,091,226	58	42	152,645	13	6	2,606,261
2W	139,050	4	22	209,950	11	33	282,264	25	45	631,264
3W	309,679	8	50	293,115	15	48	111,262	9	2	714,056
Total	3,649,089	100	-	1,891,640	100	-	1,148,888	100	-	6,689,617

*The "After Major Renovation" figures are used.

New Construction

Almost 90 percent of all new construction was concentrated in Zones 1, 2E and 3E, from the Transit Mall Zone east to the Willamette River. Only 12 percent of all new construction activity occurred west of the Transit Mall, four percent in Zone 2W and eight percent in Zone 3W.

New construction, as a percentage of all activity in one zone, claimed more square footage than either major renovation or demolition in all zones except Zone 2W, where it claimed the smallest percentage of building activity in that zone. New construction in Zone 2W accounted for 22 percent of all building activity in that zone, while in each of the other four zones, new construction accounted for at least 50 percent of all building activity.

Major Renovation

Over half (58%) of all major renovation activity took place in Zone 1 along the Mall. The locations of three of Portland's largest retail department stores in Zone 1, all of which were renovated during the study time period, contribute significantly to the high percentage of major renovation activity in this zone. The other four zones each ex-

perienced less than 16 percent of all major renovation activity. Twenty-six percent of all renovation occurred west of the Mall in Zones 2W and 3W, and 16 percent occurred east of the Mall in Zones 2E and 3E. It is interesting to note that more individual structures underwent major renovation in Zone 3E than in any of the other zones. However, due to the older low-rise character of so many of these structures, their total square footage was less than that in most other zones where newer and larger buildings tend to be located.

Major renovation as a percent of all activity in one zone was highest in Zones 1 and 3W. In Zone 1, renovation accounted for 42 percent of all building activity in that zone and for 48 percent in Zone 3W. Major renovation comprised 33 percent of all activity in Zone 2W, 14 percent in Zone 3E and eight percent in Zone 2E.

Demolition

Almost 60 percent of all demolition activity occurred in the two zones adjacent to the Mall Zone. Zone 2E lost the greatest amount of floor area (34%) to demolition and Zone 2W lost 25 percent. Zones 1, 2E and 2W combined experienced 72 percent of all demolition activity. The remaining 28 percent occurred in the extreme east and west zones.

Demolition as a percent of all activity in one zone was highest in Zone 2W (45%). This is the only zone in which demolition was greater than new construction activity. Demolition accounted for 25 percent of all activity in Zone 2E, 19 percent in Zone 3E, 6 percent in the Mall Zone, and two percent in Zone 3W.

BUILDING ACTIVITY IN INDIVIDUAL ZONES

Zone 3E

Zone 3E is located the farthest east of the Transit Mall along the Willamette River, as shown in Figure 2. From SW Taylor Street north to W. Burnside, the zone takes in the Yamhill and a portion of the Skidmore/Old Town Historic Districts. This area is characterized by older low-rise buildings, many of which have undergone restoration, several infill development projects and surface parking lots. South of Taylor Street to Jefferson Street, the zone is characterized by extensive demolition and redevelopment which has occurred over the last 15 years.

Building activity from 1973 to 1980 in Zone 3E is presented in Table 4. New construction, major renovation and demolition are broken down by the amount of floor area involved in each of the seven building uses.

TABLE 4

FLOOR AREA IN BUILDING USES
BY BUILDING ACTIVITY
ZONE 3E
1973 - 1980

USE	ACTIVITY							
	NEW CONSTRUCTION		MAJOR RENOVATION				DEMOLITION	
			BEFORE		AFTER			
	S.F.	%	S.F.	%	S.F.	%	S.F.	%
Vacant	NA	-	124,000	73%	-	-	178,695	82%
Commercial	56,269	7%	27,625	16%	65,087	38%	31,165	14%
Office	734,772	92%	13,750	8%	102,049	60%	1,800	1%
Hotel	-	-	-	-	-	-	6,750	3%
Housing	5,524	1%	-	-	2,250	2%	-	-
Institutional	-	-	4,500	3%	-	-	-	-
Parking	-	-	-	-	-	-	-	-
Total	796,565	100%	169,875	100%	169,386	100%	218,410	100%

New Construction. The figures in Table 4 indicate that the overwhelming majority of new floor area (92%) was constructed for office use. One Main Place and Willamette Center account for most of this new space. Commercial use claimed seven percent of the new construction in Zone 3E. Housing claimed one percent, representing entirely a two-story apartment rental addition to the existing Thomas Mann building. This

perienced less than 16 percent of all major renovation activity. Twenty-six percent of all renovation occurred west of the Mall in Zones 2W and 3W, and 16 percent occurred east of the Mall in Zones 2E and 3E. It is interesting to note that more individual structures underwent major renovation in Zone 3E than in any of the other zones. However, due to the older low-rise character of so many of these structures, their total square footage was less than that in most other zones where newer and larger buildings tend to be located.

Major renovation as a percent of all activity in one zone was highest in Zones 1 and 3W. In Zone 1, renovation accounted for 42 percent of all building activity in that zone and for 48 percent in Zone 3W. Major renovation comprised 33 percent of all activity in Zone 2W, 14 percent in Zone 3E and eight percent in Zone 2E.

Demolition

Almost 60 percent of all demolition activity occurred in the two zones adjacent to the Mall Zone. Zone 2E lost the greatest amount of floor area (34%) to demolition and Zone 2W lost 25 percent. Zones 1, 2E and 2W combined experienced 72 percent of all demolition activity. The remaining 28 percent occurred in the extreme east and west zones.

Demolition as a percent of all activity in one zone was highest in Zone 2W (45%). This is the only zone in which demolition was greater than new construction activity. Demolition accounted for 25 percent of all activity in Zone 2E, 19 percent in Zone 3E, 6 percent in the Mall Zone, and two percent in Zone 3W.

BUILDING ACTIVITY IN INDIVIDUAL ZONES

Zone 3E

Zone 3E is located the farthest east of the Transit Mall along the Willamette River, as shown in Figure 2. From SW Taylor Street north to W. Burnside, the zone takes in the Yamhill and a portion of the Skidmore/Old Town Historic Districts. This area is characterized by older low-rise buildings, many of which have undergone restoration, several infill development projects and surface parking lots. South of Taylor Street to Jefferson Street, the zone is characterized by extensive demolition and redevelopment which has occurred over the last 15 years.

Building activity from 1973 to 1980 in Zone 3E is presented in Table 4. New construction, major renovation and demolition are broken down by the amount of floor area involved in each of the seven building uses.

TABLE 4

FLOOR AREA IN BUILDING USES
BY BUILDING ACTIVITY
ZONE 3E
1973 - 1980

USE	ACTIVITY							
	NEW CONSTRUCTION		MAJOR RENOVATION				DEMOLITION	
			BEFORE		AFTER			
	S.F.	%	S.F.	%	S.F.	%	S.F.	%
Vacant	NA	-	124,000	73%	-	-	178,695	82%
Commercial	56,269	7%	27,625	16%	65,087	38%	31,165	14%
Office	734,772	92%	13,750	8%	102,049	60%	1,800	1%
Hotel	-	-	-	-	-	-	6,750	3%
Housing	5,524	1%	-	-	2,250	2%	-	-
Institutional	-	-	4,500	3%	-	-	-	-
Parking	-	-	-	-	-	-	-	-
Total	796,565	100%	169,875	100%	169,386	100%	218,410	100%

New Construction. The figures in Table 4 indicate that the overwhelming majority of new floor area (92%) was constructed for office use. One Main Place and Willamette Center account for most of this new space. Commercial use claimed seven percent of the new construction in Zone 3E. Housing claimed one percent, representing entirely a two-story apartment rental addition to the existing Thomas Mann building. This

addition of 5,524 square feet was the only floor area newly constructed for housing use in the entire study area. In Zone 3E, there was twice as much new construction as major renovation and demolition activities combined.

Major Renovation. The 169,875 square feet of floor area which underwent major renovation in Zone 3E was distributed among vacant, commercial, office and institutional uses before the work began. Afterwards, the 169,386 square feet of renovated floor area was occupied for three uses - commercial, office and housing. Nearly three-fourths (73%) of the space which became involved in renovation had been vacant at least one year before the activity began. Most of that previously vacant space was converted for office use as a result of renovation. Floor area in commercial use increased via the renovation process and ranked second (38%) to floor area in office use (60%) in terms of total floor area after renovation. Major renovation and conversion of uses resulted in a loss of institutional space in Zone 3E.

More individual buildings in Zone 3E underwent renovation than in any of the other zones. However, due to the smaller, historical character of so many of these buildings, their total square footage was less than in most other zones where newer and larger buildings tend to be located.

Demolition. A total of 218,410 square feet of floor area was demolished in Zone 3E, most of which (82%) had been vacant at least one year prior to demolition. Of the remaining 18 percent of demolished space, 14 percent had been occupied for commercial use, one percent for office use and three percent by a hotel. Demolition comprised the lowest percentage of all building activity in Zone 3E.

Zone 2E

Zone 2E is located between Zones 1 and 3E, directly east of and adjacent to the Mall Zone. Building activity from 1973 to 1980 in Zone 2E is presented in Table 5. New construction, major renovation and demolition are broken down by the amount of floor area involved in each of the seven building uses.

TABLE 5

FLOOR AREA IN BUILDING USES
BY BUILDING ACTIVITY
ZONE 2E
1973 - 1980

USE	ACTIVITY							
	NEW CONSTRUCTION		MAJOR RENOVATION				DEMOLITION	
			BEFORE		AFTER			
	S.F.	%	S.F.	%	S.F.	%	S.F.	%
Vacant	NA	-	42,444	33%	NA	-	248,624	65%
Commercial	40,783	4%	17,569	14%	19,594	15%	75,000	20%
Office	14,000	2%	63,450	50%	30,160	24%	38,250	9%
Hotel	-	-	-	-	-	-	-	-
Housing	-	-	-	-	78,209	61%	-	-
Institutional	720,450	69%	4,500	3%	-	-	22,432	6%
Parking	266,172	25%	-	-	-	-	-	-
Total	1,041,405	100%	127,963	100%	127,963	100%	384,307	100%

New Construction. The figures in Table 5 indicate that newly constructed space was occupied for commercial, office, institutional and parking uses. The greatest percentage (69%) of new floor area was constructed for institutional use, followed by 25 percent for parking use. Two new major government buildings, the Justice Center and the Federal Building, account for the high percentage of institutional use. The remaining six percent of new floor area was occupied by commercial and office uses. Overall, Zone 2E experienced approximately twice as much new construction activity as major renovation and demolition activity combined.

Major Renovation. The 127,963 square feet of floor area which underwent major renovation in Zone 2E was either vacant

or occupied for commercial, office or institutional uses before the work began. Afterwards, the same amount of floor area was distributed among commercial, office and housing uses. A significant amount of housing space was gained through renovation and conversion of space previously vacant or in office use in Zone 2E. More than half (61%) of the renovated square footage was occupied for housing use, 24 percent for office use and 15 percent for commercial use.

Demolition. The highest percentage of demolished floor area in Zone 2E (65%) had been vacant at least one year prior to demolition. However, 20 percent of the space had been occupied for commercial use, nine percent for office use and six percent for institutional use.

Zone 1

Zone 1, centrally located within the study area, includes the Transit Mall and building sites adjacent to it. The remodelling of three major retail department stores located in Zone 1 - Meier & Frank, J.C. Penney and Frederick and Nelson - account for the significantly high amount of square footage involved in major renovation in this zone. Building activity from 1973 to 1980 in Zone 1 is presented in Table 6. New construction, major renovation and demolition are broken down by the amount of floor area involved in each of the seven building uses.

New Construction. The majority of newly constructed floor area (70%) was occupied for office use, followed by 22 percent for institutional use and eight percent for commercial use. There was no new construction of housing, hotel or parking in Zone 1. As shown in Table 3, Zone 1 experienced the highest percentage (37%) of new construction of all zones in the study area.

TABLE 6

FLOOR AREA IN BUILDING USES
BY BUILDING ACTIVITY
ZONE 1
1973 - 1980

USE	ACTIVITY							
	NEW CONSTRUCTION		MAJOR RENOVATION				DEMOLITION	
			BEFORE		AFTER			
	S.F.	%	S.F.	%	S.F.	%	S.F.	%
Vacant	NA	-	-	-	-	-	8,415	5%
Commercial	103,860	8%	789,775	72%	790,026	72%	50,530	33%
Office	950,164	70%	231,500	21%	239,244	22%	16,200	11%
Hotel	-	-	-	-	-	-	18,000	12%
Housing	-	-	69,150	7%	61,956	6%	59,500	39%
Institutional	308,366	22%	-	-	-	-	-	-
Parking	-	-	-	-	-	-	-	-
Total	1,362,390	100%	1,090,426	100%	1,091,226	100%	152,645	100%

Major Renovation. The figures in Table 6 indicate that the square footage of floor area involved in renovation was distributed among the same three uses in approximately the same proportions both before and after the renovation work. After the work was completed, 72 percent of the floor area was still occupied for commercial use, primarily by the three major retail department stores. The remaining 28 percent was divided between office use which occupied 22 percent and housing which occupied six percent of the floor area.

Zone 1 was the only zone in the study area that had housing space before renovation began. Zone 1 was also the only zone in which none of the space which underwent renovation had been vacant at least one year before the renovation activity began.

Demolition. Demolition accounted for a very small percentage of all building activity within the zone. Only five percent of the demolished floor area had been vacant at least one year prior to demolition, as shown in Table 6. Over 70 percent of the demolished floor area had been occupied for housing and commercial uses combined. The remaining 23 percent had been divided between office use (11%) and hotel use (12%).

Zone 2W

Zone 2W is located between Zones 1 and 3W, directly west of and adjacent to Zone 1, the Mall Zone. Building activity in Zone 2W from 1973 to 1980 is presented in Table 7. New construction, major renovation and demolition are broken down by the amount of floor area involved in each of the seven building uses.

TABLE 7
FLOOR AREA IN BUILDING USES
BY BUILDING ACTIVITY
ZONE 2W
1973 - 1980

USE	ACTIVITY							
	NEW CONSTRUCTION		MAJOR RENOVATION				DEMOLITION	
			BEFORE		AFTER			
	S.F.	%	S.F.	%	S.F.	%	S.F.	%
Vacant	NA	-	68,000	33%	-	-	114,750	41%
Commercial	139,050	100%	36,070	18%	49,915	24%	36,750	13%
Office	-	-	45,955	22%	140,485	67%	-	-
Hotel	-	-	19,550	10%	-	-	-	-
Housing	-	-	-	-	19,550	9%	47,600	17%
Institutional	-	-	-	-	-	-	83,164	29%
Parking	-	-	34,000	17%	-	-	-	-
Total	139,050	100%	203,575	100%	209,950	100%	282,264	100%

New Construction. The entire amount of new construction in Zone 2W is represented by one commercial structure, Nordstrom department store. New construction claimed the smallest percentage of all building activity in the zone, unlike all the other zones. This role of new construction in Zone 2W can be partially explained by the fact that the address of a major new building, Pacific First Federal Center, is in Zone 1, while the building demolished on the site for the new structure, the old YMCA, had an address in Zone 2W. Therefore, the loss of floor area in Zone 2W was made up in new construction in Zone 1.

Major Renovation. The 203,575 square feet of floor area which became involved in renovation were distributed among vacant, commercial, office, hotel and parking uses before

renovation began. Renovation and conversion resulted in an increased total floor area of 209,950 square feet distributed among three uses - commercial, office and housing. Renovation and conversion resulted in losses in hotel and parking uses and gains in housing. Two-thirds of the renovated space in Zone 2W was occupied for office use, 24 percent for commercial use and nine percent for housing.

Demolition. More floor area was demolished in Zone 2W than was involved in renovation or new construction activities. It is the only zone in the study area which experienced more demolition than new construction. Forty-one percent of the demolished floor area had been vacant at least one year before demolition, and the remaining 59 percent had been distributed among commercial, housing and institutional uses.

Zone 3W

Zone 3W is the zone farthest west of the Transit Mall, bounded on the far side by the I-405 freeway. Building activity in Zone 3W from 1973 to 1980 is presented in Table 8. New construction, major renovation and demolition are broken down by the amount of floor area involved in each of the seven building uses.

TABLE 8

FLOOR AREA IN BUILDING USES
BY BUILDING ACTIVITY
ZONE 3W
1973 - 1980

USE	ACTIVITY							
	NEW CONSTRUCTION		MAJOR RENOVATION				DEMOLITION	
			BEFORE		AFTER			
	S.F.	%	S.F.	%	S.F.	%	S.F.	%
Vacant	NA	-	190,240	58%	NA	-	18,562	17%
Commercial	37,056	12%	12,750	4%	96,030	33%	18,000	16%
Office	59,994	19%	65,250	19%	114,175	39%	34,000	31%
Hotel	-	-	46,750	14%	-	-	27,200	24%
Housing	-	-	-	-	82,910	28%	-	-
Institutional	-	-	15,525	5%	-	-	-	-
Parking	212,629	69%	-	-	-	-	13,500	12%
Total	309,679	100%	330,515	100%	293,115	100%	111,262	100%

New Construction. The majority of new floor area in Zone 3W (69%) was constructed for parking use. Of the remaining 31 percent of newly constructed floor area, 19 percent was occupied for office use and 12 percent for commercial use.

Major Renovation. The amount of square footage of space involved in major renovation in Zone 3W was similar to the amount of new construction. Fifty-eight percent of the floor area which became involved in renovation had been vacant at least one year before the renovation work began. A significant amount of that vacant space was in one structure which after renovation was called the Galleria and was occupied for commercial and office uses. The creation of a central atrium in the Galleria partially explains the significant loss of floor area in Zone 3W after renovation work was completed. Floor area in hotel and institutional uses before renovation activity began was converted during the process to other uses, primarily housing.

Demolition. Demolition represented the smallest percentage of all building activity in Zone 3W. Only 17 percent of the demolished floor area had been vacant at least one year before demolition. Thirty-one percent of the demolished space had been in office use, 24 percent in hotel use, 16 percent in commercial use and 12 percent in parking use. Zone 3W was the only zone in which parking was demolished.

BUILDING USES IN ALL ZONES

New Construction

Table 9 presents for all new construction activity the amounts of square footage of floor area involved in each of the seven building uses in all five zones in the study area from 1973 to 1980.

TABLE 9

NEW CONSTRUCTION
FLOOR AREA IN BUILDING USES
BY ZONE
1973 - 1980

USE	ZONE 3E	ZONE 2E	ZONE 1	ZONE 2W	ZONE 3W	TOTAL
Vacant	NA	NA	NA	NA	NA	NA
Commercial	56,269	40,783	103,860	139,050	37,056	377,018
Office	734,772	14,000	950,164	-	59,994	1,758,930
Hotel	-	-	-	-	-	-
Housing	5,524	-	-	-	-	5,524
Institutional	-	720,450	308,366	-	-	1,028,816
Parking	-	266,172	-	-	212,629	478,801
Total	796,565	1,041,405	1,362,390	139,050	309,679	3,649,089

Commercial. New floor area was constructed for commercial use in all five zones. However, except in Zone 2W, this floor area generally was located on the ground floors of office buildings and parking structures distributed fairly evenly among the other four zones. Zone 2W was the only zone with a new primarily commercial structure, Nordstrom, representing the single largest gain in commercial space in any zone in the entire study area.

Office. Ninty-five percent of the new office space was located in two zones combined, Zone 3E along the Willamette River and Zone 1 along the Mall.

Hotel. There was no new hotel construction in the study area between 1973 and 1980.

Housing. The only new construction of housing consisted of a two story apartment rental addition to the Thomas Mann Building in Zone 3E. The addition was constructed at the same time that the original structure was undergoing major renovation.

Institutional. All new construction of institutional floor area was located in Zones 2E and 1. The Justice Center and the Federal Building are in Zone 2E, and the new Public

Service Building is in Zone 1.

Parking. New construction of parking occurred only in Zones 3W and 2E. Morrison Park East was the only new parking structure built in Zone 2E. Morrison Park West was joined by other new parking construction in Zone 3W, but it comprised the greatest amount.

Major Renovation

Table 10 presents for all major renovation activity the amounts of square footage of floor area involved in each of the seven building uses in all five zones in the study area from 1973 to 1980.

TABLE 10

MAJOR RENOVATION
FLOOR AREA IN BUILDING USES
BY ZONE
1973 - 1980

USE	ZONE 3E	ZONE 2E	ZONE 1	ZONE 2W	ZONE 3W	TOTAL
BEFORE RENOVATION						
Vacant	124,000	42,444	-	68,000	190,240	424,684
Commercial	27,625	17,569	789,776	36,070	12,750	883,790
Office	13,750	63,450	231,500	45,955	65,250	419,905
Hotel	-	-	-	19,550	46,750	66,300
Housing	-	-	69,150	-	-	69,150
Institutional	4,500	4,500	-	-	15,525	24,525
Parking	-	-	-	34,00	-	34,000
Total	169,875	127,963	1,090,426	203,575	330,515	1,922,354
AFTER RENOVATION						
Vacant	-	-	-	-	-	-
Commercial	65,087	19,594	790,026	49,915	96,030	1,020,652
Office	102,049	30,160	239,244	140,485	114,175	626,113
Hotel	-	-	-	-	-	-
Housing	2,250	78,209	61,956	19,550	82,910	244,875
Institutional	-	-	-	-	-	-
Parking	-	-	-	-	-	-
Total	169,386	127,963	1,091,226	209,950	293,115	1,891,640

Vacant. Only in Zone 1 had none of the floor area involved in renovation been vacant at least one year before renovation began. In the other four zones, the largest amount of previously vacant floor area was in Zone 3W. After renovation

was completed there was no vacant floor area in any of the zones.

Commercial. All five zones had floor area in commercial use both before and after renovation activity began. Over 750,000 square feet of floor area in Zone 1 became involved in the renovation process, while floor area involved in the other four zones never exceeded 100,000 square feet of space. The two zones the farthest from the Mall Zone, Zones 3W and 3E, experienced the largest gains in commercial space through conversion of previous uses after the renovation was completed.

Office. Zone 1 had the greatest amount of floor area in office use which became involved in renovation. However, Zones 3E, 2W and 3W all gained more significant percentages of office space as a result of the renovation process than Zone 1. Zone 2E was the only zone which lost office space, due to the conversion of one large structure to housing.

Hotel. Only two Zones, 2W and 3W, both west of the Mall, contained floor area in hotel use before renovation began. This space was converted for other uses during renovation, resulting in no floor area for hotel use after the renovation activity was completed.

Housing. Only Zone 1 had floor area in housing use which became involved in and resulted from the renovation process. Due to conversions from previous other uses to housing use during renovation, all five zones had floor area occupied for housing use after renovation was completed. Zone 3W benefitted the most from increased housing space, and Zone 3E the least.

Institutional. While Zones 3W, 2E and 3E all had floor area

in institutional use before renovation began, none of that space was occupied for institutional use after the renovation work was completed. All of the space previously in institutional use was converted to other uses as part of the renovation activity.

Parking. All floor area in parking use prior to renovation was in one structure located in Zone 2W, the United Carriage House. Renovation of this structure resulted in floor area for commercial and office uses and a loss of parking space.

Demolition

Table 11 presents for all demolition activity the amounts of square footage of floor area involved in each of the seven building uses before demolition, in all five zones in the study area from 1973 to 1980.

TABLE 11

DEMOLITION
FLOOR AREA IN BUILDING USES
BY ZONE
1973 - 1980

USE	ZONE 3E	ZONE 2E	ZONE 1	ZONE 2W	ZONE 3W	TOTAL
Vacant	178,695	248,625	8,415	114,750	18,562	569,047
Commercial	31,165	75,000	52,530	36,750	18,000	211,445
Office	1,800	38,250	16,200	-	34,000	90,250
Hotel	6,750	-	18,000	-	27,200	51,950
Housing	-	-	59,500	47,600	-	107,100
Institutional	-	22,432	-	83,164	-	105,596
Parking	-	-	-	-	13,500	13,500
Total	218,410	384,307	152,645	282,264	111,262	1,148,888

Vacant. The greatest amounts of demolished floor area in each of Zones 3E, 2E and 2W had been vacant at least one year prior to demolition. Vacant floor area comprised only a small proportion of demolished space in Zone 1.

Commercial. The demolition of commercial floor area occurred in all five zones, with Zone 2E experiencing loss of the

greatest amount.

Office. Demolition activity claimed floor area in office use in every zone except Zone 2W. The greatest amount of demolished square footage in office use occurred in Zone 2E. Demolition of all office space in the study area totaled less than 100,000 square feet.

Hotel. Demolished floor area in hotel use in Zones 3E, 1 and 3W represent one hotel building in each zone.

Housing. Demolition of housing occurred only in Zones 1 and 2W. Zone 1 had slightly more demolished floor area in housing use than Zone 2W.

Institutional. The demolition of institutional floor area occurred only in Zones 2E and 2W, adjacent to and on either side of the Mall Zone.

Parking. Demolition of floor space in parking use occurred only in Zone 3W where three parking structures were leveled.

SUMMARY

The Transit Mall Zone experienced the greatest amount of the 6.7 million square feet of building activity in the downtown study area between 1973 and 1980. Large amounts of building activity also occurred in the zones east of the Mall toward the Willamette River. Zones west of the Mall experienced the least amount of building activity.

New construction accounted for more than half of all building activity within each zone except in Zone 2W directly west of the Transit Mall. Demolished square footage outnumbered the other two building activities in Zone 2W. However, new con-

struction along the Transit Mall made up for some of the lost floor area in Zone 2W due to the orientation of a new building constructed on the site of one which had been included in Zone 2W as demolition.

The overwhelming majority of newly constructed space was occupied for office and institutional uses. Most of the new office space was located in Zone 1 along the Mall and in Zone 3E along the Willamette River. Most of the new institutional space was concentrated along the Mall and directly east of it in Zone 2E.

Every zone experienced new construction for commercial use. Zone 2W, directly west of the Mall, experienced the greatest amount of new commercial space due to the construction of the new Nordstrom store. The Mall Zone gained the second highest amount of new commercial floor area, located in the ground floors of primarily office and institutional structures.

New parking structures were constructed east and west of the Mall in Zones 2E and 3W. The small amount of new housing constructed was an addition to an existing building east of the Mall in Zone 3E along the Willamette River. There was no new hotel space constructed in the study area between 1973 and 1980.

The Transit Mall Zone had substantially more square footage involved in renovation than any of the other zones. The location of three major remodeled retail stores in Zone 1 contribut to its leading position. Zones to the west of the Mall experienced more renovation activity than zones to the east of the Mall. After renovation activity was completed, the floor area in all zones was occupied only for commercial, office and housing uses. Only the Transit Mall Zone had floor area in housing use before renovation began, and only

Zone 1 lost floor area in housing use as a result of renovation. All other zones gained housing space through conversion of previous uses such as hotel and office space during the renovation process.

Most demolition occurred to prepare sites for construction of new and larger structures. The largest concentrations of demolished floor area coincided with the largest concentrations of new construction, in Zone 3E near the Willamette River and in Zone 1 along the Mall.

Most of the demolished floor area had been vacant for at least one year before demolition occurred. Zone 1 had the least proportion of vacant floor area which became involved in the renovation process. Zones 2E and 2W, just east and west of and adjacent to the Mall Zone, experienced the highest percentages of all demolition activity by zone in the study area.

SECTION IV
BUILDING ACTIVITY AND USE BY TIME PERIOD

Section IV discusses the distribution of the three building activities and the seven building uses among three time periods from 1973 to 1980. These time periods are Before-Mall Construction (1973 - 1975), During-Mall Construction (1976 - 1977) and After-Mall Construction (1978 - 1980). The section is organized into three parts, each of which examines building activity by time periods from a different point of view. The first part briefly discusses the overall extent of new construction, major renovation and demolition in all three time periods. The second part focuses on the individual time periods. It examines for each time period the primary building uses involved in new construction, major renovation and demolition. The third part focuses on building uses involved in the three building activities across all three time periods. It highlights in which time periods the primary building uses involved in new construction, major renovation and demolition were the most predominant. These three parts are followed by a summary of the major findings in this section.

BUILDING ACTIVITY IN ALL TIME PERIODS

Table 12 presents the extent of new construction, major renovation and demolition activities in all three time periods. The After-Mall Construction period experienced the most building activity of the three time periods. The second greatest amount of activity occurred in the Before-Mall Construction period and the least activity in the During-Mall Construction period.

New Construction

The greatest amount of all new construction activity (48%) in

the study area occurred in the After-Mall Construction period, followed by 35 percent in the Before-Mall Construction period, and 17 percent in the During-Mall Construction period.

TABLE 12

TOTAL BUILDING ACTIVITY
BY TIME PERIOD
1973 - 1980

TIME PERIOD	ACTIVITY									
	NEW CONSTRUCTION			MAJOR RENOVATION*			DEMOLITION			TOTAL ACTIVIT IN TIM PERIOD
	Square Footage	% New Construction	% Total Activity In Time Period	Square Footage	% Major Renovation	% Total Activity In Time Period	Square Footage	% Demolition	% Total Activity In Time Period	
Before-Mall Construction 1973 - 1975	1,282,669	35	66	296,360	16	15	379,595	33	19	1,958,62
During Mall Construction 1976 - 1977	632,257	17	36	837,001	44	48	286,062	25	16	1,775,32
After-Mall Construction 1978 - 1980	1,734,163	48	58	758,279	40	25	483,231	42	17	2,976,57
Total	3,649,089	100	-	1,891,640	100	-	1,148,888	100	-	6,689,61

*The "After Major Renovation" figures are used.

New construction accounted for 66 percent of all building activity in the Before-Mall Construction period, 36 percent During-Mall Construction and 58 percent After Mall Construction. New construction activity was greater than either major renovation or demolition activities in both the Before-Mall and After-Mall Construction periods, but was second to major renovation in the During-Mall Construction period.

Major Renovation

The During-Mall Construction period experienced the greatest amount of all major renovation activity (44%) in the study area, followed by the After-Mall Construction period with 40 percent and the Before-Mall Construction period with 16 percent.

Major renovation comprised 15 percent of all building activity

which occurred in the Before-Mall Construction period, 48 percent During-Mall Construction and 25 percent After-Mall Construction. Major renovation activity in the Before-Mall Construction period was less than either new construction or demolition activity, but accounted for the greatest percentage of all activity (48%) in the During-Mall Construction period. In the After-Mall Construction period, major renovation accounted for 25 percent of all building activity, second to new construction.

Demolition

Forty-two percent of all demolition occurred in the After-Mall Construction period. The Before-Mall Construction period followed with 33 percent and the During-Mall Construction period with 25 percent of all demolition activity.

Demolition activity was never greater than 19 percent of all building activity during any of the three time periods. It comprised the least percentage of all activity in both the During-Mall and After-Mall Construction periods, but was second to new construction in the Before-Mall period.

BUILDING ACTIVITY IN INDIVIDUAL TIME PERIODS

Before-Mall Construction: 1973 - 1975

Building activity which occurred in the Before-Mall Construction period between 1973 and 1975 is presented in Table 13. New construction, major renovation and demolition are broken down by the amount of floor area involved in each of the seven building uses.

New Construction. Total square footage of floor area involved in new construction during the Before-Mall period was almost twice the amount involved in major renovation and demolition combined. Of the nearly 1.3 million square feet

of floor area constructed between 1973 and 1975, 63 percent was occupied for office use and 26 percent for institutional use. The remaining 11 percent of new floor space was occupied for commercial and parking uses.

TABLE 13

FLOOR AREA IN BUILDING USES
BY BUILDING ACTIVITY
BEFORE-MALL CONSTRUCTION PERIOD
1973 - 1975

USE	ACTIVITY							
	NEW CONSTRUCTION		MAJOR RENOVATION				DEMOLITION	
			BEFORE		AFTER			
	S.F.	%	S.F.	%	S.F.	%	S.F.	%
Vacant	NA	NA	18,360	6%	-	-	207,795	55%
Commercial	77,000	6%	84,500	29%	107,000	36%	22,000	6%
Office	811,994	63%	189,000	64%	189,360	64%	63,750	17%
Hotel	-	-	-	-	-	-	33,950	9%
Housing	-	-	-	-	-	-	47,600	12%
Institutional	330,675	26%	4,500	1%	-	-	-	-
Parking	63,000	5%	-	-	-	-	4,500	1%
Total	1,282,669	100%	296,360	100%	296,360	100%	379,595	100%

Major Renovation. Major renovation comprised the least amount of building activity which occurred in the Before-Mall Construction period. Before the renovation process began, the 296,360 square feet of floor area which was renovated was either vacant (6%) or occupied for commercial and office uses. Afterwards, the same amount of floor area was occupied for commercial and office uses. The six percent of floor area which was vacant prior to renovation was converted to commercial use.

Demolition. Demolition accounted for the second greatest amount of all building activity which occurred in the Before-Mall Construction period.

Over half (55%) of the demolished floor area had been vacant at least one year prior to demolition. The remaining 45 percent was distributed among all the other building uses except institutional use.

During-Mall Construction: 1976 - 1977

Building activity which occurred in the During-Mall Construction period between 1976 and 1977 is presented in Table 14. New construction, major renovation and demolition are broken down by the amount of floor area involved in each of the seven building uses.

TABLE 14

FLOOR AREA IN BUILDING USES
BY BUILDING ACTIVITY
DURING-MALL CONSTRUCTION PERIOD
1977 - 1977

USE	ACTIVITY							
	NEW CONSTRUCTION		MAJOR RENOVATION				DEMOLITION	
			BEFORE		AFTER			
	S.F.	%	S.F.	%	S.F.	%	S.F.	%
Vacant	NA	-	216,900	25%	-	-	176,312	62%
Commercial	187,656	30%	523,146	60%	608,796	73%	96,750	34%
Office	28,800	5%	84,205	10%	145,205	17%	8,500	3%
Hotel	-	-	46,750	5%	-	-	-	-
Housing	-	-	-	-	83,000	10%	-	-
Institutional	-	-	-	-	-	-	-	-
Parking	415,801	65%	-	-	-	-	4,500	1%
Total	632,257	100%	871,001	100%	837,001	100%	286,062	100%

New Construction. During-Mall Construction period was the only time period which experienced less new construction than major renovation activity. New parking space accounted for 65 percent of the new construction activity, followed by 30 percent for commercial use and five percent for office use. This time period was the only one in which office use occupied the least percentage of new floor area.

Major Renovation. Major renovation comprised the largest proportion of all building activity between 1976 and 1977. The remodelling of the 471,826 square feet of floor area in the Meier and Frank department store accounts for the bulk of the renovated commercial floor area in the During-Mall Construction period. Before the activity began, 25 percent of the floor area which became involved in the renovation process had been vacant for at least one year. Sixty percent

was occupied for commercial use, and the remaining 15 percent was either in use for office or hotel purposes. Afterwards, the largest percentage (73%) of renovated floor space was in commercial use, followed by 17 percent in office use and ten percent occupied for housing use. The floor area in hotel use was lost through conversion to new uses.

Demolition. Demolition represented the least amount of all building activity which occurred in the During-Mall Construction period between 1976 and 1977. Sixty-two percent of the demolished floor area had been vacant at least one year prior to demolition, 34 percent had been occupied for commercial use, and the remaining four percent had been either in use for parking or office purposes. The least amount of all demolition activity occurred during this two year period.

After-Mall Construction: 1978 - 1980

Building activity which occurred in the After-Mall Construction period between 1978 and 1980 is presented in Table 15. New construction, major renovation and demolition are broken down by the amount of floor area involved in each of the seven building uses.

New Construction. The After-Mall Construction period experienced the largest amount of new construction activity during the entire study period, with the addition of over 1.7 million square feet of new space. New construction activity outranked major renovation and demolition activities combined, by almost 30 percent. The greatest percentage of new floor area (53%) was occupied for office use between 1978 and 1980. Forty percent was occupied for institutional use, and the remaining seven percent was divided between commercial (6%) and housing (1%) uses. No new floor area was constructed for parking or hotel uses in the After-Mall construction period between 1978 and 1980.

TABLE 15

FLOOR AREA IN BUILDING USES
BY BUILDING ACTIVITY
AFTER-MALL CONSTRUCTION PERIOD
1978 - 1980

USES	ACTIVITY							
	NEW CONSTRUCTION		MAJOR RENOVATION				DEMOLITION	
			BEFORE		AFTER			
	S.F.	%	S.F.	%	S.F.	%	S.F.	%
Vacant	NA	-	189,424	26%	-	-	184,940	38%
Commercial	112,362	6%	276,144	36%	304,856	40%	92,695	19%
Office	918,136	53%	146,700	19%	291,548	38%	18,000	4%
Hotel	-	-	19,500	3%	-	-	18,000	4%
Housing	5,524	1%	69,150	9%	161,875	22%	59,500	12%
Institutional	698,141	40%	20,025	3%	-	-	105,596	22%
Parking	-	-	34,000	4%	-	-	4,500	1%
Total	1,734,163	100%	754,993	100%	758,279	100%	483,231	100%

Major Renovation. Major renovation activity was second to new construction during this time period. The floor area which became involved in major renovation in the After-Mall Construction period was either vacant or occupied by one of the other six building uses before the renovation process began. When renovation and conversion were completed, all renovated floor area was concentrated in only three uses: commercial (40%), office (38%) and housing (22%). The After-Mall Construction period from 1978 through 1980 experienced a larger gain in renovated housing space than either of the other two time periods.

Demolition. Demolition activity accounted for the least amount of all building activity during the After-Mall Construction period. Demolished floor space had been either vacant or occupied by one of the other six building uses prior to demolition. Thirty-eight percent of the floor area demolished between 1978 and 1980 had been vacant at least one year before demolition, followed by 22 percent in institutional use and 19 percent in commercial use. The remaining 21 percent of demolished floor space was distributed among office (4%), hotel (4%), housing (12%) and parking (1%) uses.

BUILDING USES IN ALL TIME PERIODS

New Construction

Table 16 presents for all new construction activity the amounts of square footage of floor area involved in each of the seven building uses in all three time periods from 1973 to 1980. The largest amount of new construction occurred in the After-Mall period, followed by the Before-Mall period. The During-Mall period experienced the least amount of construction activity in the entire study period.

TABLE 16

NEW CONSTRUCTION
FLOOR AREA IN BUILDING USES
BY TIME PERIOD
1973 - 1980

	BEFORE-MALL CONSTRUCTION 1973 - 1975	DURING-MALL CONSTRUCTION 1976 - 1977	AFTER-MALL CONSTRUCTION 1978 - 1980
Vacant	NA	NA	NA
Commercial	77,000	187,656	112,362
Office	811,994	28,800	918,136
Hotel	-	-	-
Housing	-	-	-
Institutional	330,675	-	698,141
Parking	63,000	415,801	-
Total	1,282,669	632,257	1,734,163

Commercial. New floor area was constructed for commercial use during all three time periods. The largest amount was constructed in the During-Mall Construction period between 1976 and 1977. This amount is partially explained by the construction of the new Nordstrom department store, the only structure built primarily for commercial use in the study area during the entire eight year study period.

The remainder of newly constructed floor area which was occupied for commercial use was ground floor space in primarily office and parking structures. The During Mall Construction period was the only period in which commercial use occupied more newly constructed floor area than office use.

Office. New floor area was constructed for office use in all three time periods. The Before-Mall and After-Mall Construction periods each gained more than 800,000 new square feet in office space, while the During-Mall Construction period gained only just under 29,000 square feet.

Hotel. There was no new hotel construction in the study area during the eight year study period.

Housing. Construction of new housing occurred during one time period only and at only one location. The 5524 square feet of new housing was a two story apartment rental addition to the Thomas Mann Building located in Zone 3E. The activity occurred in the After-Mall Construction period.

Institutional. New construction for institutional use occurred in the Before-Mall and After-Mall Construction periods, but not at all in the During-Mall period. Three new large public buildings account for all new floor area occupied for institutional use. The Federal Building was built in the Before-Mall Construction period, and the Justice Center and the Public Service Building both were under construction in 1980 at the close of the After-Mall period. The total square footage in the latter two buildings combined is more than twice the floor area of the new Federal Building.

Parking. Parking structures were constructed in the Before-Mall and During-Mall Construction periods. The parking space constructed in the Before-Mall period is accounted for by the garage under O'Bryant Square and the structure adjacent to the Portland Medical Clinic in Zone 3W. The larger amount of parking space constructed in the During-Mall period represents two above-ground structures, Morrison East and Morrison West parking garages, which are owned and operated by the City of Portland. These structures are located in Zones 2E

and 3W, respectively.

Major Renovation

Table 17 presents for all major renovation activity the amounts of square footage of floor area involved in each of the seven building uses in all three time periods between 1973 and 1980. The greatest amount of floor area underwent renovation between 1976 and 1977 in the During-Mall Construction period. The least amount occurred in the Before-Mall period.

TABLE 17

MAJOR RENOVATION
FLOOR AREA IN BUILDING USES
BY TIME PERIOD
1973 - 1980

BEFORE RENOVATION

USE	TIME PERIOD		
	BEFORE-MALL CONSTRUCTION 1973 - 1975	DURING-MALL CONSTRUCTION 1976 - 1977	AFTER-MALL CONSTRUCTION 1978 - 1980
Vacant	18,360	216,900	189,424
Commercial	84,500	523,146	276,144
Office	189,000	84,205	146,700
Hotel	-	46,750	19,550
Housing	-	-	69,150
Institutional	4,500	-	20,025
Parking	-	-	34,000
Total	296,360	871,001	754,993

AFTER RENOVATION

USE	TIME PERIOD		
	BEFORE-MALL CONSTRUCTION 1973 - 1975	DURING-MALL CONSTRUCTION 1976 - 1977	AFTER-MALL CONSTRUCTION 1978 - 1980
Vacant	NA	-	-
Commercial	107,000	608,796	307,856
Office	189,360	145,205	291,548
Hotel	-	-	-
Housing	-	83,000	161,875
Institutional	-	-	-
Parking	-	-	-
Total	296,360	837,001	758,279

Vacant. Vacant floor area was renovated and converted to new building uses in all three time periods. The largest amount of vacant floor area was renovated and converted in the During-Mall Construction period, closely followed by the

After-Mall period. Those two periods combined, from 1976 to 1980, experienced renovation of just over 400,000 vacant square feet, all of which was converted to commercial, office, and housing uses.

Commercial. More commercial floor area became involved in the renovation process in the During-Mall and After-Mall Construction periods than any other building use. Similarly, after the renovation work was completed, commercial use comprised the greatest percentages of floor area in those two periods. Significantly less floor area in commercial use became involved in renovation in the Before-Mall period, although conversions resulted in an increase in commercial floor area after renovation work was completed. One of the three major retail businesses was remodeled during each time period: J.C. Penney in the Before-Mall period, Meier and Frank in the During-Mall period, and Frederick and Nelson in the After-Mall Construction period.

Office. The least amount of office space became involved in the renovation process and resulted from renovation and conversion between 1976 and 1977, in the During-Mall Construction period. Office space increased as a result of conversion and renovation in each time period.

Hotel. There was no renovation activity which resulted in additional hotel space in the study area. Hotel space was lost in the During-Mall and After-Mall Construction periods as a result of renovation and conversion to other uses.

Housing. Several significant downtown housing renovation projects occurred in the During-Mall and After-Mall Construction periods between 1976 and 1980. All but one of the projects involved conversions from other uses to housing uses. Three hotels in Zone 3W were renovated and converted to

permanent housing in the During-Mall Construction period. A large office building, 333 Oak Plaza, located in Zone 2E was renovated and converted to housing in the After-Mall Construction period. Also in the latter time period, a hotel which had been vacant at least one year before renovation began was converted to housing units called Western Rooms.

In the Before-Mall Construction period, no floor area in housing use became involved in renovation and no renovation and conversion activity resulted in additional housing use. The greatest amount of floor area in housing use after renovation was completed occurred in the After-Mall period.

Institutional. Floor area in institutional use became involved in renovation in the Before-Mall and After-Mall periods, but not in the During-Mall Construction period. This floor area comprised the smallest percentage of space in one use which underwent renovation. Conversion during the renovation process resulted in the loss of all that institutional space, and none of the other renovation activity in the study area resulted in additional floor area in institutional use.

Parking. All parking space which became involved in the renovation process was represented by one parking structure in Zone 2W which in the After-Mall Construction period was renovated and converted to office and commercial uses.

Demolition

Table 18 presents for all demolition activity the amounts of square footage of floor area involved in each of the seven building uses in all three time periods between 1973 and 1980. The After-Mall Construction period lost 483,231 square feet to demolition, the greatest amount in any of the three

time periods. The least amount of demolition occurred in the During-Mall Construction period.

TABLE 18

DEMOLITION
FLOOR AREA IN BUILDING USES
BY TIME PERIOD
1973 - 1980

USE	TIME PERIOD		
	BEFORE-MALL CONSTRUCTION 1973 - 1975	DURING-MALL CONSTRUCTION 1976 - 1977	AFTER-MALL CONSTRUCTION 1978 - 1980
Vacant	207,795	176,312	184,940
Commercial	22,000	96,750	92,695
Office	63,750	8,500	18,000
Hotel	33,950	-	18,000
Housing	47,600	-	59,500
Institutional	-	-	105,596
Parking	4,500	4,500	4,500
Total	379,595	286,062	483,231

Vacant. The greatest percentage of square footage demolished in each time period had been vacant at least one year prior to demolition. More vacant floor space was demolished between 1973 and 1975 than in either of the other two time periods.

Commercial. Floor area in commercial use was demolished during all three time periods. The During-Mall Construction period lost 96,750 square feet, slightly more than the 97,695 square feet of floor area demolished between 1978 and 1980 in the After-Mall period. By comparison, only 22,000 square feet of floor area were demolished in the Before-Mall period.

Office. The Before-Mall Construction period experienced the largest amount of office space demolition and the During-Mall Construction period the least amount.

Hotel. Floor area in hotel use was demolished in both the Before-Mall and After-Mall Construction periods, but not in the During-Mall Construction period. The U.S. Hotel and the

Anne Marie Hotel were lost to demolition before the Mall was constructed, and the 5th Avenue Hotel after it was completed.

Housing. Similar amounts of floor area in housing use were demolished in the Before-Mall and After-Mall Construction periods, while none was demolished in During-Mall Construction period.

Institutional. All floor area in institutional use which was demolished during the eight year study period occurred between 1978 and 1980 in the After-Mall period.

Parking. Equal amounts (4500 s.f.) of parking space were demolished during each of the three time periods.

SUMMARY

The greatest amount of building activity in the downtown study area between 1973 and 1980 occurred in the After-Mall Construction period from 1978 through 1980. The least activity occurred in the During-Mall Construction period.

New construction comprised the greatest percentage of building activity within each time period except the During-Mall period when major renovation accounted for the greatest amount of building activity. New office and institutional floor area comprised the largest proportion of new space in the Before-Mall and After-Mall Construction periods. New parking floor area constituted the largest amount of new space in During-Mall Construction period.

Significantly less major renovation occurred in the Before-Mall period than in the During-Mall and After-Mall Construction periods. Between 1976 and 1977, the largest amount of vacant floor area was renovated and converted to occupied

SECTION V

APPENDIX

TABLE AX-1

NEW CONSTRUCTION IN PORTLAND CBD 1973 - 1980

BUILDING NAME/ADDRESS	GROSS SQ. FT.	NET RENTABLE SQ. FT.	COMMERCIAL	OFFICE	HOTEL	HOUSING	INSTITUTIONAL	PARKING
Zone 3e								
Willamette Center (B)*	798,067	480,000	40,000	440,000				
One Main Place (A)	430,000	309,241	16,269	292,972				
Thomas Mann Bldg. Addition (A)	6,500	5,524				5,524		
Failing Bldg. Addition (D)	2,000	1,800		1,800				
Sub-total	1,236,567	796,565	56,269	734,772		5,524		
Zone 2e								
Justice Center (A)*	472,038	400,258	10,483				389,775	
Morrison Park East (D)	331,443	284,472	18,300					266,172
Federal Building (B)	515,145	330,675					330,675	
Far West Federal Center (B)	30,000	26,000	12,000	14,000				
Sub-total	1,348,626	1,041,405	40,783	14,000			720,450	266,172
Zone 1								
U.S. Bank Plaza (B)	494,000	350,000	25,000	325,000				
Public Service Bldg. (A)	365,000	321,000	12,634				308,366	
T. N. Bldg. (A)	120,000	113,574	21,744	91,830				
Orbanco Bldg. (A)	415,000	354,000	35,000	319,000				
Pacific First Federal Center (A)	223,816	223,816	9,482	214,334				
Sub-total	1,711,387	1,362,390	103,860	950,164			308,366	
Zone 2w								
Nordstroms (D)	154,500	139,050	139,050					
Sub-total	154,500	139,050	139,050					
Zone 3w								
Morrison Park West[1] (D)	202,650	176,245	26,616					149,629
Safeway Addition (D)	4,100	3,690	3,690					
OPS Blue Shield (D)	30,000	27,000		27,000				
Portland Clinic (B)	37,257	32,994		32,994				
Portland Clinic Parking Garage (B)	50,000	45,000						45,000
O'Bryant Square Parking (B)	20,000	18,000						18,000
MacDonald's (A)	7,500	6,750	6,750					
Sub-total	351,507	309,679	37,056	59,994				212,629
SUM TOTAL	4,802,587	3,649,089	377,018	1,758,930		5,524	1,028,816	478,801

[1]After subtracting commercial square footage from the gross, the remainder was decreased 15% to reflect a consistent net rentable figure.

*Codes in parentheses indicate time periods.

(B) - Before Mall Construction, 1973 - 1975

(D) - During Mall Construction, 1976 - 1978

(A) - After Mall Construction, 1979 - 1980

TABLE AX-2

MAJOR RENOVATION IN PORTLAND CBD 1973 - 1980

BUILDING NAME/ADDRESS	GROSS SQ. FT.	NET RENTABLE SQ. FT.	BEFORE RENOVATION VACANT	COMMERCIAL	OFFICE	HOTEL	HOUSING	INSTITUTIONAL	PARKING
Zone 3e									
Powers Bldg. (A)	14,000	11,900	8,500	900	2,500				
Poppleton Bldg. (A)	7,500	6,750	4,500		2,250				
Patrick Bldg. (D)	13,500	12,150	12,150						
Chuck's Steak House (B)	10,000	9,000	9,000						
Mikado Bldg. (B)	15,000	13,500	9,000					4,500	
Delschneider Bldg. (D)	7,500	6,750	4,500	2,250					
208 Bldg. (A)	22,500	20,250	20,250						
Glisan Bldg. (A)	9,000[1]	4,050		4,050					
Failing Bldg. (D)	17,000[2]	13,500	9,000	4,500					
Thomas Mann Bldg. (A)	16,250[3]	8,775	5,850	2,925					
Strowbridge Bldg. (A)	15,000	13,500	9,000	4,500					
Smith Block (A)	7,500	6,750	6,750						
Hazeltine Bldg. (A)	40,000	34,000	25,500	8,500					
201 SW 1st. (A)	10,000	9,000			9,000				
sub-total	204,750	169,875	124,000	27,625	13,750			4,500	
Zone 2e									
39 SW 3rd (B)	400	360	360						
333 Oak Plaza (A)	75,000	63,750		6,375	57,375				
Hamilton Bldg. (D)	30,000	25,500	21,250	4,250					
Bishop House (A)	6,750	6,075			6,075				
Western Rooms (A)	32,680	27,778	20,834	6,944					
Porter Bldg. (A)	15,000	4,500[1]						4,500	
sub-total	159,830	127,963	42,444	17,569	63,450			4,500	
Zone 1									
J.C. Penney (B)	80,000[2]	69,500		69,500					
Meier & Frank (D)	555,090[2]	471,826		471,826					
Frederick & Nelson (A)	254,000[2]	215,900		215,900					
Commonwealth Bldg. (B)	240,000	204,000		15,000	189,000				
Mead Bldg. (A)	70,000	59,500		17,000	42,500				
Ambassador Condos (A)	82,000	69,700		550			69,150		
sub-total	1,281,090	1,090,426		789,776	231,500		69,150		
Zone 2w									
Electric Bldg. (A)	90,000	76,500	68,000	8,500					
Admiral Apts. (A)	23,000	19,550				19,550			
United Carriage Co. (A)	47,500	34,000							34,000
Broadway/ Peck Bldg. (D)	86,500	73,525		27,570	45,955				
sub-total	247,000	203,575	68,000	36,070	45,955	19,550			34,000

[1]Only 1 floor renovated

[2]New construction added 2,000 sq. ft. not included in renovated space

[3]New construction added 6,500 sq. ft. not included in renovated space

(B) - Before Mall Construction, 1973 - 1975

(D) - During Mall Construction, 1976 - 1978

(A) - After Mall Construction, 1979 - 1980

TABLE AX-2 (con't)

MAJOR RENOVATION IN PORTLAND CBD 1973 - 1980

BUILDING NAME/ADDRESS	GROSS SQ. FT.	NET RENTABLE SQ. FT.	VACANT	COMMERCIAL	OFFICE	HOTEL	HOUSING	INSTITUTIONAL	PARKING
			BEFORE RENOVATION						
Zone 3w									
Galleria (D)	200,000	170,000[4]	170,000						
Roosevelt Plaza (D)	40,000	34,000			4,250	29,750			
Rosenbaum Plaza (D)	50,000	42,500		8,500	34,000				
Eaton Apts. (D)	25,000	21,250		4,250		17,000			
Carlyle Bldg. (A)	20,000	17,000[4]	17,000						
OPS Blue Shield (A)	30,000	27,000			27,000				
Beth Israel School Bldg. (A)	17,250	15,525						15,525	
522 SW 13th (A)	3,600	3,240	3,240						
sub-total	385,850	330,515	190,240	12,750	65,250	46,750	-	15,525	-
SUM TOTAL	2,278,520	1,922,354	424,684	883,790	419,905	66,300	69,150	24,525	34,000

[4]Less square feet after renovation due to atrium

(B) - Before Mall Construction, 1973 - 1975
(D) - During Mall Construction, 1976 - 1978
(A) - After Mall Construction, 1979 - 1980

TABLE AX-3

MAJOR RENOVATION IN PORTLAND CBD 1973 - 1980

BUILDING NAME/ADDRESS	GROSS SQ. FT.	NET RENTABLE SQ. FT.	COMMERCIAL	OFFICE	HOTEL	HOUSING	INSTITUTIONAL	PARKING
			AFTER RENOVATION					
Zone 3e								
Powers Bldg. (A)	14,000	11,900	2,975	8,925				
Poppleton Bldg. (A)	7,500	6,750	2,250	4,500				
Patrick Bldg. (D)	13,500	12,150	4,050	8,100				
Chuck's Steakhouse (B)	10,000	9,000	9,000					
Mikado Bldg. (B)	15,000	13,500	13,500					
Delschneider Bldg. (D)	7,500	6,750	2,250	2,250		2,250		
208 Bldg. (A)	22,500	20,250	6,750	13,500				
Glisan Bldg. (A)	9,000[1]	4,050	4,050					
Failing Bldg. (D)	17,000[2]	13,500	4,500	9,000				
Thomas Mann Bldg. (A)	16,250[3]	8,286	2,762	5,524				
Strowbridge Bldg. (A)	15,000	13,500	4,500	9,000				
Smith Block (A)	7,500	6,750		6,750				
Hazeltine Bldg. (A)	40,000	34,000	8,500	25,500				
201 SW 1st (A)	10,000	9,000		9,000				
sub-total	204,750	169,386	65,087	102,049		2,250		
Zone 2e								
39 SW 3rd (B)	400	360		360				
333 Oak Plaza (A)	75,000	63,750	6,375			57,375		
Hamilton Bldg. (D)	30,000	25,500	4,250	21,250				
Bishop House (A)	6,750	6,075	2,025	4,050				
Western Rooms (A)	32,680	27,778	6,944			20,834		
Parker Bldg. (A)	15,000	4,500[1]		4,500				
sub-total	159,830	127,963	19,594	30,160		78,209		
Zone 1								
J.C. Penney (B)	80,000[2]	69,500	69,500					
Meier & Frank (D)	555,090[2]	471,826	471,826					
Frederick & Nelson (A)	254,000[2]	215,900	215,900					
Commonwealth Bldg. (B)	240,000	204,000	15,000	189,000				
Mead Bldg. (A)	70,000	60,300	17,800[4]	42,500				
Ambassador Condos (A)	82,000	69,700		7,744		61,956		
sub-total	1,281,090	1,091,226	790,026	239,244		61,956		
Zone 2w								
Electric Bldg. (A)	90,000	76,500	8,500	68,000				
Admiral Apts. (A)	23,000	19,550				19,550		
United Carriage Co. (A)	47,500	40,375	13,845	26,530				
Broadway/Peck Bldg. (D)	86,500	73,525	27,570	45,955				
sub-total	247,000	209,950	49,915	140,485		19,550		

[1] Only 1 floor renovated

[2] Major remodeled retailer

[3] Two newly constructed floors not included in renovated net square footage

[4] Expanded useable floor area in basement

(B) - Before Mall Construction, 1973 - 1975

(D) - During Mall Construction, 1976 - 1978

(A) - After Mall Construction, 1979 - 1980

TABLE AX-3 (con't)

MAJOR RENOVATION IN PORTLAND CBD 1973 - 1980

BUILDING NAME/ADDRESS	GROSS SQ. FT.	NET RENTABLE SQ. FT.	AFTER RENOVATION COMMERCIAL	OFFICE	HOTEL	HOUSING	INSTITUTIONAL	PARKING
Zone 3w								
Galleria (D)	200,000	136,000[5]	81,600	54,400				
Roosevelt Plaza (D)	40,000	34,000		4,250		29,750		
Rosenbaum Plaza (D)	50,000	42,500	8,500			34,000		
Eaton Apts. (D)	25,000	21,250	4,250			17,000		
Carlyle Bldg. (A)	20,000	13,600[5]	600	13,000				
OPS Blue Shield (A)	30,000	27,000		27,000				
Beth Israel School Bldg. (A)	17,250	15,525		15,525				
522 SW 13th (A)	3,600	3,240	1,080			2,160		
sub-total	385,850	293,115	96,030	114,175		82,910		
SUM TOTAL	2,278,520	1,891,640	1,020,652	626,113		244,875		

[5]Less square feet after renovation due to atrium

(B) - Before Mall Construction, 1973 - 1975
(D) - During Mall Construction, 1976 - 1978
(A) - After Mall Construction, 1979 - 1980

TABLE AX-4

DEMOLITION IN PORTLAND CBD 1973 - 1980

BUILDING NAME/ADDRESS	GROSS SQ. FT.	NET RENTABLE SQ. FT.	VACANT	COMMERCIAL	OFFICE	HOTEL	HOUSING	INSTITUTIONAL	PARKING
Zone 3e									
924 SW 1st (B)	5,000	4,500	4,500						
U.S. Hotel (B)	22,500	20,250	13,500			6,750			
1017 SW Front (B)	2,500		2,250						
1023 SW Front (B)	2,500	2,250	2,250						
1027 SW Front (B)	2,250	2,250	2,250						
1033 SW Front (B)	8,800	7,920	7,920						
1036 SW Front (B)	15,000	13,500	13,500						
1020-28 SW 1st (B)	5,000	4,500	4,500						
Australia Hotel (B)	15,000	13,500	13,500						
911-17 SW 1st (B)	10,000	9,000	9,000						
923-29 SW 1st (B)	15,000	13,500	13,500						
117 SW Salmon (B)	2,500	2,250	2,250						
922 SW 2nd (B)	25,000	22,500	22,500						
Marion Hotel (A)	15,000	13,500	13,500						
Mission (A)	2,750	2,475	2,475						
1123-29 SW 1st (A)	15,000	13,500	13,500						
138 SW Salmon (A)	4,128	3,715		3,715					
1014 SW 2nd (A)	2,000	1,800			1,800				
Kennelworth Hotel (A)	28,500	25,650	17,100	8,550					
Old Main Tavern (A)	25,000	22,500	13,500	9,000					
1021-27 SW 1st (A)	12,000	10,800	7,200	3,600					
1123 SW 2nd (A)	4,500	4,050		4,050					
Artificial Limb Co. (A)	2,500	2.250		2,250					
sub-total	245,678	218,410	178,695	31,165	1,800	6,750			
Zone 2e									
300-20 SW Madison (B)	10,000	9,000	2,250	6,750					
1212-14 SW 4th (B)	15,000	13,500	13,500						
1222 SW 4th (B)	3,750	3,375	3,375						
321 SW Jefferson (B)	22,500	20,250	20,250						
1225 SW 3rd (B)	10,000	9,000	9,000						
1215-19 SW 3rd (B)	5,000	4,500	4,500						
1239 SW 3rd (B)	2,500	2,250		2,250					
Title Ins. Bldg. (B)	40,000	34,000	17,000	4,250	12,750				
Times Bldg. (B)	35,000	29,750	8,500	4,250	17,000				
Blue Mouse Theatre (D)	20,000	18,000		18,000					
Alisky/Semler Bldg. (D)	40,000	34,000	17,000	8,500	8,500				
611-17 SW 3rd (D)	5,000	4,500	4,500						
607 SW 3rd (D)	5,000	4,500		4,500					
312-18 SW Alder (D)	2,500	2,250		2,250					
600 SW 4th (D)	25,000	21,250	17,000	4,250					
612-14 SW 4th (D)	10,000	9,000	4,500	4,500					
Lennox Hotel (A)	40,000	34,000	27,500	6,500					
Madison Bldg. (A)	20,000	18,000	18,000						
Swiss Cleaners (A)	5,000	4,500		4,500					
City Hall Annex (A)	24,000	21,600						21,600	
City/County Motorpool (A)	925	832						832	
Hughes Bldg. (A)	75,000	63,750	63,750						
Vines Hotel (B)	15,000	13,500	9,000	4,500					
Public Market (B)	10,000	9,000	9,000						
sub-total	456,175	384,307	248,625	75,000	38,250			22,432	

TABLE AX-4 (con't)

DEMOLITION IN PORTLAND CBD 1973 - 1980

BUILDING NAME/ADDRESS	GROSS SQ. FT.	NET RENTABLE SQ. FT.	VACANT	COMMERCIAL	OFFICE	HOTEL	HOUSING	INSTITUTIONAL	PARKING
Zone 1									
Trailways Depot (A)	36,000	32,400		16,200	16,200				
5th Avenue Hotel (A)	30,000	27,000		9,000		18,000			
Hotel Congress (A)	80,000	68,000		8,500			59,500		
104 SW 5th (A)	28,050	25,245	8,415	16,830					
sub-total	174,050	152,645	8,415	50,530	16,200	18,000	59,500		
Zone 2w									
Sheffield Apts. (B)	16,000	13,600					13,600		
1210 SW Park (B)	40,000	34,000					34,000		
YMCA (A)	97,840	83,164						83,164	
Orpheum Theatre (D)	75,000	63,750	51,000	12,750					
Royal Bldg. (D)	90,000	76,500	63,750	12,750					
Morrison St. Bldg. (D)	10,000	9,000		9,000					
737 SW Yamhill (D)	2,500	2,250		2,250					
sub-total	331,340	282,264	114,750	36,750			47,600	83,164	
Zone 3w									
Anne Marie Hotel (B)	32,000	27,200				27,200			
340 SW 10th (B)	5,000	4,500							4,500
1216 SW Yamhill (B)	40,000	34,000			34,000				
Ockley Hotel (D)	30,000	27,000	18,000	9,000					
Roberts Bldg. (D)	10,000	9,000		9,000					
804 SW 12th (D)	625	562	562						
820 SW Alder (A)	5,000	4,500							4,500
811 SW Park (A)	5,000	4,500							4,500
sub-total	127,625	111,262	18,562	18,000	34,000	27,200	-	-	13,500
SUM TOTAL	1,334,868	1,144,888	569,047	211,445	90,250	51,950	107,100	105,596	13,500

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